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ABSTRACT

As part of a longitudinal study of women's and coeducational college graduates, women's career salience ratings and aspirations were compared. Participants were 1979 female graduates of 15 small, private, liberal arts colleges in the northeastern United States that had three selectivity levels: selective, very selective, and highly selective. A mailed questionnaire collected data on these variables: career salience, organizational level aspired to, innovativeness of career, and plans to pursue graduate education. One-way least squares analyses of variance indicated that more career salient women tend to plan for graduate education and enter less traditional careers but their aspirations on the organizational ladder are no higher than those of less career salient women. Results raised questions about women's career aspiration levels and women's roles and about measurement of women's aspirations. (YLB)

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Needed: A Valid Measure of Women's Career Aspirations

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Needed: A Valid Measure of Women's Career Aspirations

In comparison to men, women have been characterized as having low ambition. Researchers have justified this characterization by citing: (1) the few women in management, (2) the low degree aspirations of women, including the low number who choose to pursue their education beyond the bachelor's level, and (3) the low number of women who choose to enter male-dominated careers which are assumed to indicate higher aspirations.

While there has been some progress in all of these areas, indications are that women still have a long way to go. For example, women are still poorly represented at the management levels of United States companies. In a review of the literature Moore and Richel (1980) found that researchers reported that in over half of U.S. firms, women held five percent or fewer first level supervisory jobs. In three-fourths of U.S. companies women hold two percent or fewer middle management positions and no top management jobs. In another study of 2,500 top level positions (chairmen, presidents, vice presidents) in major corporations, it was found that there were approximately 16 women.

Astin has documented that the number of women aspiring to advanced degrees has increased drastically over the 1969-1979 period (Scott, 1980). Thirty percent more women plan to pursue the Ph.D. Enrollments in professional schools are also up,--medicine by 300 percent, law by 900 percent and divinity by 200 percent. Despite these huge gains, the National Center for Education Statistics projects that women will still receive only one-third the doctorates and first professional degrees in 1990.

At the undergraduate level, women are also enrolling increasingly in the nontraditional fields of business and engineering. These areas have experienced increases of 100 percent and 500 percent respectively during the same ten year period. Kahne (1979) also reports that enrollments of women in nontraditional fields have increased. In 1966 only 5.9 percent of women were enrolled in nontraditional fields. By 1976 this percentage had climbed to 19.4.

Researchers have traditionally studied women's career aspirations by assessing their goals in three areas: the highest degree planned/obtained, the occupation planned/entered and the traditional versus nontraditional nature of the chosen occupation. Lentz (1982) proposed that women's career aspirations might also be determined by asking women to indicate the level of the organization to which they aspire (top management, middle management, staff, etc.). This model is a conventional one for men and since most traditional female jobs can also be defined in such a way that they fit the organizational model, it was suggested that it be tried for women.

As part of a longitudinal study of women's college graduates and coeducational college graduates from institutions at three selectivity levels, women's career salience ratings and aspirations were compared. Angrist's Life Style Index was used to determine career salience. Aspirations were assessed in three ways: (1) level of the organization aspired to, (2) pursuit of graduate or professional education, and (3) innovativeness of chosen career. Results indicate that graduates of very selective women's colleges are more career salient than their counterparts from comparable coeducational colleges. Among coeducational colleges graduates of highly selective colleges are significantly more career salient than women who attended selective or very selective institutions. For both college types, career salience ratings are directly related to selectivity level of the college. These results led the researcher to hypothesize that aspirations might differ according to college type and selectivity level also. Analyses of variance found no differences when level of the organization aspired to and plans to pursue post-baccalaureate education were used as dependent variables. While no differences in the tendency to pursue innovative careers was found between college types, selectivity level of the coeducational colleges is related to pursuit of nontraditional careers. Graduates of selective colleges were less likely to enter male-dominated careers than graduates of more selective institutions.

The findings related to career salience and aspirations led the author to explore the relationsnip between these two variables. It is the purpose of this paper to report the results of that exploration. Three hypotheses were tested:

1. There is a relationship between women's career salience ratings and the level of the organization aspired to.
2. There is a relationship between women's career salience ratings and the pursuit of innovative careers.
3. There is a relationship between women's career salience ratings and the continuation of education past the bachelor's degree.

Method

Subjects

The subjects for the study are participants in a longitudinal study of differences in women's career salience with college type and college selectivity level serving as independent variables. The 1979 female graduates of fifteen, small, private, liberal arts colleges are the subjects. The institutions from which they come are located in the northeastern United States and are characterized by similar programs and costs. Although some of the colleges maintain their historical denominational affiliations, only those which operate as nondenominational institutions were included in the study.

Using Barron's Profiles of American Colleges (1973), women's colleges and coeducational colleges which fit the criteria stated above regarding size, type of college, type of program, geographic location, and cost were identified. Colleges of each type were then divided into three groups based upon their level of admission competitiveness (selective, very selective, highly selective) as defined by Barron.

> Selective Colleges: Students from the top 50% of the high school graduating class, median SAT scores 450 to 550, median ACT scores of 21 to 23.
>
> Very Selective Colleges: Students from the top 30% to 50% of the high school graduating class, median SAT scores 550 to 600, median ACT scores of 23 to 26.

Highly Selective Colleges: Students from the top 20% to 30% of the high school graduating class, median SAT scores 600 to 675, median ACT scores of 26 to 28.

Within each cell of the research design defined by college type and selectivity level the colleges which fit the criteria of the study were compared using Astin's (1965) five Estimated Freshman Input Factors and eight Scores on the Environmental Assessment Technique. This comparison was accomplished by graphing the T-score of each variable for each college being considered for the study on a grid designed by Astin. The three colleges that appeared to be most similar within each group were chosen by the researcher to be solicited for participation in the study. Greater detail about the selection of the 18 preferred colleges for the study are contained in the 1977 report by Lentz.

Letters explaining the study were sent to the presidents of the chosen colleges. These were followed by telephone calls and interviews at 16 institutions. Fourteen of the sixteen colleges agreed to participate in the original study. In 1979 these colleges and the third very selective women's college originally selected for the study agreed to participate in subsequent studies. Rather than complete the research design with less similar, alternate colleges, the researcher opted for greater consistency and incomplete cells.

The distribution of colleges and subjects for the 1980 study, which occurred when the subjects were one year post-baccalaureate and upon which this study is based, is shown in Table 1.

Insert Table 1 about here

Instrumentation

The questionnaire used in this research was developed by Shirley Angrist and modified by this researcher to meet the needs of post-baccalaureate women. Questions were divided into four categories: educational background, career plans,

family influences, and parental background. Embedded in the survey instrument were the eleven dichotomously scored items which Angrist (1971-72) identified as forming a Life Style Index, a measure of career salience. The items on this index relate to pursuit of post-baccalaureate education; desire to work versus participate in clubs, hobbies, or volunteer activities; desire to work when various combinations of children's ages and adequacy of husband's salary are considered; and goal for fifteen years hence.

Angrist computed the test-retest reliability of the Life Style Index as .79 using the freshman through junior indices. When the sophomore through senior indices were used in the computation, the test-retest reliability was .88. While Angrist presented no evidence of the instrument's validity, the rationale for the selection of items and the face validity of the items are consistent with definitions of career salience such as that provided by Masih (1967).

An item analysis on the Life Style Index was performed by this researcher. One item was found to be poor in discriminating between career salience and noncareer salience. The remaining items had point biserial correlations between .30 and .70, the recommended preference level (Ebel, 1965; Lindquist, 1951). The split-half reliability of the index was calculated as .78 while the Kuder-Richardson-21 reliability coefficient, the mean of all split-half coefficients resulting from different splittings of the index, was .685.

Within the educational background section of the questionnaire students responded to a question regarding their plans to continue their education by attending graduate school, professional school or other training within the next four years or at some future time. This question served as the dependent variable in one of the analyses.

Dependent variables for the other two analyses came from the section on career plans. Subjects were asked to respond to a direct question regarding their career aspirations:

As you contemplate your career, what are your aspirations?

1. to own your own business
2. to hold a top management position in a large company
3. to hold a top management position in a small company
4. to hold a middle management position
5. to hold a staff position
6. to do free-lance work (art, writing, consulting, etc.)
7. to not hold a paying job
8. other: _____

This question was based upon an organizational model of aspiration, but seemed appropriate since most jobs can be defined in such a way that they fit the model.

The third dependent variable used to determine whether there are differences in women's career aspirations between college types and among selectivity levels was "innovativeness of career choice." The sixty possible occupations students could select were divided into three categories depending upon the proportions of males and females in them. Those occupations with an overwhelming majority of males were categorized as nontraditional. Occupations generally filled by women were categorized as traditional. Neutral occupations had fairly equal proportions of both sexes.

Procedures

The collection of data was done by mail using updated address lists furnished by the fifteen colleges. Letters were sent to the 2,224 subjects explaining this phase of the longitudinal study, requesting participation, and telling them that they would be receiving questionnaires soon. Two weeks later the survey instrument, with a postage-paid return envelope, was mailed. Reminders were sent to nonrespondents at two to three week intervals. In the event the questionnaire was misplaced or lost in the mail, the second reminder included another copy of the questionnaire and a return envelope. An overall response rate of 53.0 percent was obtained.

Data Analysis

One-way least squares analyses of variance were carried out to determine whether there are differences in women's aspirations among levels of career salience. Life Style scores of 0 to 6.99 were defined as low career salience, scores of 7.00 to 9.99 represented median career salience, while scores of 10.00 and above equaled high ca-

reer salience. Organizational level aspired to, innovativeness of chosen career, and plans to pursue graduate or professional education served as dependent variables in separate analyses.

Results

Aspiration Defined by an Organizational Model

A least squares analysis of variance to assess difference in women's career aspirations among groups having high, medium, or low career salience ratings was carried out. No significant differences were found in career aspirations among the groups; highly career salient women do not aspire to positions that are significantly higher on the organizational ladder than less career salient women.

Aspiration Defined by "Innovativeness of Chosen Career"

While career salient women may not aspire to higher positions on the organizational ladder than their less career salient sisters, they may prefer to climb a traditionally male career ladder rather than pursue a traditionally female career. The second analysis of variance confirmed that there are significant differences in role innovativeness among levels of career salience, $F_{(2,165)} = 9.045$, $p < .001$; the higher the career salience the more likely the woman is to choose a nontraditional career. Scheffé post hoc tests indicate significant differences, $p < .01$, exist when pairwise comparisons are made between levels of career salience; i.e., comparisons of high career salient women with median career salient women, median career salient women with low career salient women.

Aspiration Defined by Pursuit of Post-Baccalaureate Education

The dependent variable in the third analysis was "plans to pursue graduate or professional education." The variable was divided into three levels: pursuit of graduate or professional education within the first four years after college graduation, pursuit of graduate or professional education at some later time, and termination of education at the baccalaureate level. Results indicate that the higher the career salience of women, the more likely they are to pursue graduate or pro-

fessional education during the first four post-baccalaureate years, $F_{(2,1165)} = 30.946$, $p < .001$. Post hoc tests, using Scheffé's S method indicate all pairwise comparisons are significant at the .01 level.

Discussion

Women's career aspirations (defined by an organizational model) have no relationship to their career salience. However, when masculinity of career and plans to continue education are considered in relationship to career salience, we find that the higher the career salience the more likely the women is to choose a traditional male occupation and to plan for graduate, professional, or other training within the first four post-baccalaureate years. Thus, we seem to have two career tracks for women--the nontraditional track most often pursued by the more career salient women, and the traditional track claiming more of the less career salient women. While the final destination of the travelers is similar (organizational level) the tracks follow different routes with the more career salient taking a longer route which includes more post-baccalaureate education.

The results of this exploratory study are interesting for two reasons. First, we have a new picture of women and their aspirations. Second, it raises some new and interesting questions related to this image. Why do those women who are committed to having a career have aspiration levels within the organizational structure that are no higher than the less career salient women? Do they lack the motivation to go higher as some researchers have suggested when comparing the sexes? Or, do they feel the level they indicated for their aspirations is the level to which they will be permitted to rise regardless of their educational preparation and chosen occupation?

These questions, which are particularly pertinent to the counseling profession, are already being considered by researchers. Bean and Wolfman (1979) noted that women's numerous roles are barriers to occupational success. In studying the effects of marriage and children on women's work, Buckley and Rowe (1978) found that con-

tinuity of employment and advancement were negatively affected by changes in family responsibilities. This was particularly true for those women living within defined sex roles.

In Bose and Priest-Jones' (1980) summary of Leo and Chow's 1975 study they state, "the women who aspire to traditionally male occupations are less achievement oriented than women who aspire to traditionally female occupations, but the innovative women are less likely to expect their major satisfaction to come from family alone. It may be risky enough for women to aspire to careers in nontraditional areas; therefore, high achievement goals may not be set." (p. 13)

Several researchers (Lemkau, 1979; and Wood and Greenfell, 1978) report that women in male-dominated jobs report more feelings of sex discrimination than women in traditional female jobs. They feel pressure from others on the job and experience role strain, which is in direct proportion to the masculinity of the job. Fortunately, these women, who have generally chosen a nontraditional career because of interest and ability, also usually have more coping skills and greater ego strength than their traditionally-oriented sisters.

In addition to raising questions related to women's ability to advance within the organizational structure of our typical workplace, the study poses questions about our measurement of women's aspirations. First, when we speak of women's aspirations, what do we mean?--their career aspirations? their educational aspirations? their family aspirations? We need to be specific; aspirations is too nebulous a term to be used as it has been in the past. Second, we need to reach consensus on how each type of aspiration can be measured. Are the measures we currently use valid? Highest degree planned/obtained sounds like a valid measure of educational aspirations. And, level of the organizational ladder aspired to seems to have face validity for measuring career aspirations. But, how do we justify ranking nontraditional jobs higher on an aspiration scale than traditional female occupations? We desperately need to define 'aspiration' and find valid measures for each type of it.

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Table 1

Distribution of Colleges and Subjects

	Colleges	Subjects
Women's Colleges		
Highly Selective	0	0
Very Selective	3	282
Selective	3	148
Coeducational Colleges		
Highly Selectiv	3	251
Very Selective	3	252
Selective	3	233